

What Is Claimed Is:

1. A display control apparatus for controlling a display apparatus which displays an image in digital gradation, comprising:

inputting means for inputting digital values corresponding to pixel values which compose the image; and

signal production means for producing a signal for driving said display apparatus so that light of divisional light amounts obtained by dividing light amounts corresponding to bits which compose the digital values may be emitted in a such manner as to be distributed within a time corresponding to one screen;

where both of a first light amount corresponding to a predetermined bit and a second light amount corresponding to a bit in a lower order by one bit to the bit are divided, the first and second light amounts being divided so that the division number of the first light amount may be smaller than twice the division number of the second light amount.

2. A display control apparatus according to claim 1, wherein the light amounts corresponding to the bits are divided in a direction of time in which the light is emitted or in a direction of intensity of the light.

3. A display control apparatus according to claim 1, wherein said signal production means produces the signal for driving said display apparatus so that the light of the divisional light amounts obtained by dividing the light amounts corresponding to the bits may be emitted at timings at which the light may be symmetrical within the time corresponding to one screen.

4. A display control apparatus according to claim 1, wherein said signal production means produces the signal for driving said display apparatus so that the light of the divisional light amounts obtained by dividing the light amount corresponding to a predetermined bit and the light of the divisional light amounts obtained by dividing the light amount corresponding to a bit adjacent to the bit may be emitted at timings close to each other within the time corresponding to one screen.

5. A display control apparatus according to claim 1, wherein said signal production means produces the signal for driving said display apparatus so that the light of the divisional light amounts obtained by dividing the light amount corresponding to the most significant bit may be emitted at least at the top and last timings within the time corresponding to one screen.

6. A display control apparatus according to claim 1, wherein the first and second light amounts are divided so that the division number of the first light amount and the division number of the second light amount may be equal to each other or the difference between the division number of the first light amount and the division number of the second light amount may be 1.

7. A display control apparatus according to claim 1, wherein said display apparatus includes light emission means for emitting light of fixed or variable intensity.

8. A display control apparatus according to claim 7, wherein said light emission means is formed from a light source which emits light of fixed or variable intensity.

9. A display control apparatus according to claim 7, wherein said light emission means is formed from a light source for emitting light of fixed or variable intensity, and a light valve for switching on/off the light of said light source.

10. A display control apparatus according to claim 7, wherein said signal production means produces the signal for causing said light emission means to emit pulse width modulated light or intensity modulated light.

11. A display control apparatus according to claim

7, wherein said signal production means produces the signal for causing said light emission means to emit pulse width modulated light and intensity modulated light.

12. A display control apparatus according to claim 7, wherein said light emission means emits light of a plurality of color components.

13. A display control apparatus according to claim 1, wherein said signal production means produces the signal for causing digital gradation display by a plane sequential rewriting method to be performed.

14. A display control method for controlling a display apparatus which displays an image in digital gradation, comprising:

an inputting step of receiving digital values corresponding to pixel values which compose the image;  
and

a signal production step of producing a signal for driving said display apparatus so that light of divisional light amounts obtained by dividing light amounts corresponding to bits which compose the digital values may be emitted in such a manner as to be distributed within a time corresponding to one screen;

where both of a first light amount corresponding to a predetermined bit and a second light amount

corresponding to a bit in a lower order by one bit to the bit are divided, the first and second light amounts being divided so that the division number of the first light amount may be smaller than twice the division number of the second light amount.